

REMARKS

Claims 1 – 7 and 14 were presented for examination. In the Office Action mailed on January 10, 2005, the Examiner rejected Claims 1, 2, and 7 under 35 U.S.C. §103(a) as being unpatentable over Zhou et al (“Bypassing Vocoders in CDMA Mobile-to-Mobile Calls”) in view of Lehtimäki (U.S. Patent No. 6,125,120); and Claims 3 – 6 were rejected under 35 U.S.C. §103(a) as being unpatentable over Zhou, in view of Lehtimäki, and further in view of Tseng, et al. (U.S. Patent No. 6,172,974). The Applicants respectfully traverse the Examiner’s rejections.

The instant claims are directed towards the transmission of wideband speech signals over a narrowband communication system. The Applicants respectfully submit that Zhou is not directed towards the transmission of wideband speech signals, but rather, the bypassing of vocoders in CDMA or Wideband CDMA (WCDMA) systems.

WCDMA is a direct sequence CDMA-based Radio Access Network operating with a chip rate of 3.84 Mcps, which is more than twice that of IS-95 systems, which operate at a chip rate of 1.2288 Mcps. Hence, WCDMA requires a transmission frequency bandwidth of 5 MHz, whereas CDMA requires a transmission frequency bandwidth of 1.25 MHz.

Because of this large difference in frequency bandwidths, the nomenclature of WCDMA was derived. WCDMA is directed towards the use of wide frequency bandwidths for the over-the-air transmission channels. However, the instant claims are directed towards wideband speech signals, wherein “wideband” describes a speech signal’s frequency spectrum. Although the word “wideband” is used for both, they represent completely different concepts to those of ordinary skill in the art, depending upon usage.

Note that Zhou only uses the QCELP vocoder as an illustrative example. The QCELP vocoder is a narrowband vocoder because input speech is sampled at 8 kHz, which provides a 4 kHz (narrowband) spectrum for analysis.

Since neither Zhou nor Lehtimaki nor Tseng teach the concept of transmitting wideband speech signals over a narrowband communication system, the Applicants respectfully submit that none of the instant claims are rendered unpatentable by these references.

CONCLUSION

In light of the arguments presented above, the Applicants respectfully submit that the instant claims are patentable. Accordingly, reconsideration and allowance of this Application is earnestly solicited. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Respectfully submitted,

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